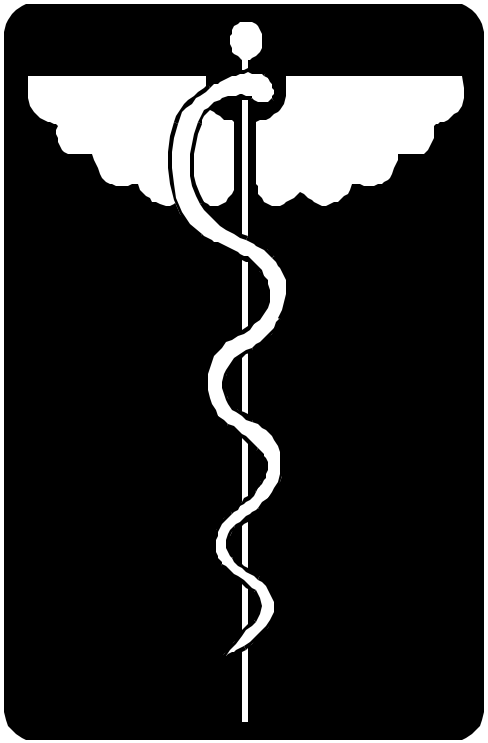
North Broward Hospital District

Healthy Community Access Program

Disease State Management Program

January 20, 2004

Disease Management Defined



Coordinated system of comprehensive health services for effective and efficient management of a condition across a continuum of care

Disease Management Model

- **Continuum of care**
- **Population-based interventions**
- **Evidence-based medicine**
- **Proactive care**
- **PCP is team leader**
- **Self-management and**
- **shared decision making**
- **Outcomes accountability**

Disease State Management Delivery System

- 4 Hospitals within NBHD
- 21 Ambulatory Sites including School Based Centers
- Gold Coast Home Specialists
- Ancillary services
- Pharmacy
- Hospitalists

Program Status

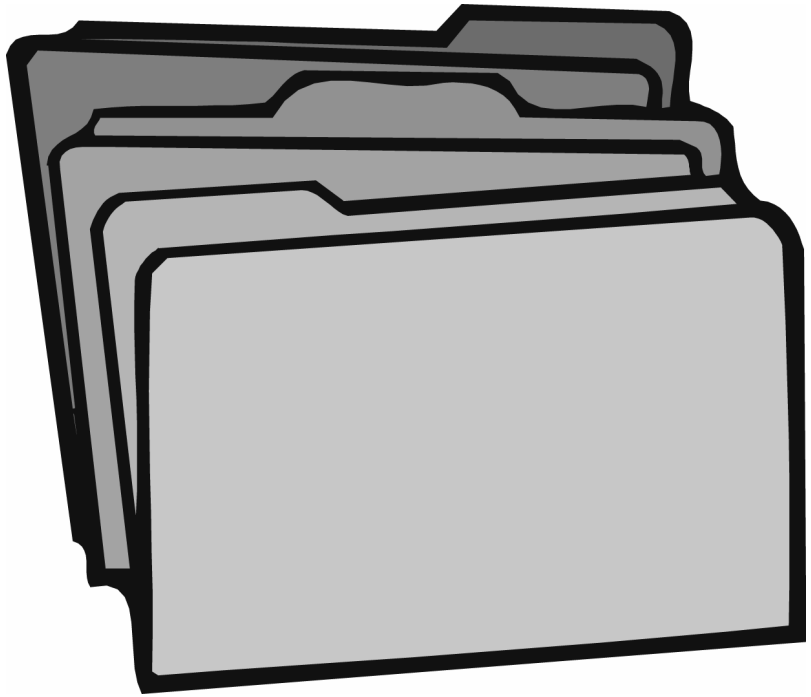
- July 1999 - Diabetes Program - 1952 pts.
- April 2000 - Asthma Program - 665 pts.
- October 2000 - HIV/AIDS Program - 233 pts
- December 2001 - Maternal Child - 259 pts.
- October 2001 - Hypertension & CHF - 224 pts.

Registry

Identification

Practitioner notification

Patient notification



Patient Education

- Classes
- Handouts
- Newsletters
- Self-care handbook
- Community Health Fairs
- Telephonic

Practitioner Education

- Dissemination of current guidelines
- Providers' Meetings
- On-site inservices
- Audioconferencing
- CME conferences
- Orientation

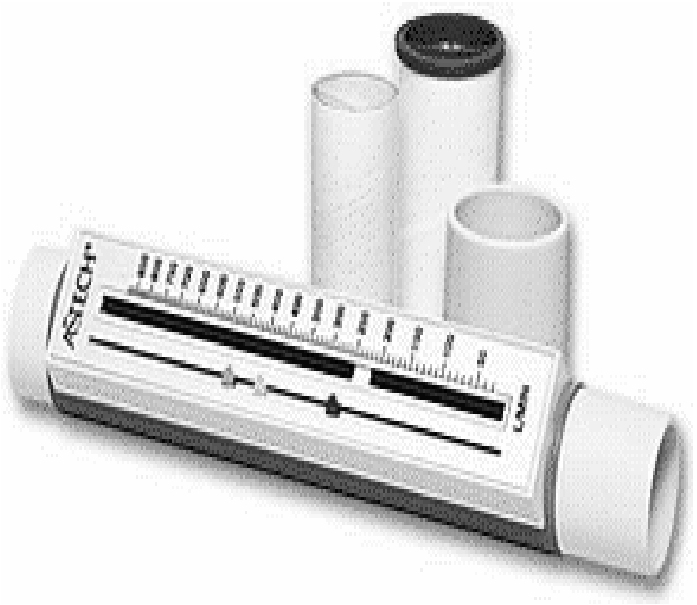
One Airway—One Disease:
The Link Between Allergic Rhinitis and Asthma

Vienna, VA
September 25, 2002

KAISER PERMANENTE®

Management Tools

Make it easy to do the right thing!



Disease Management Outcomes

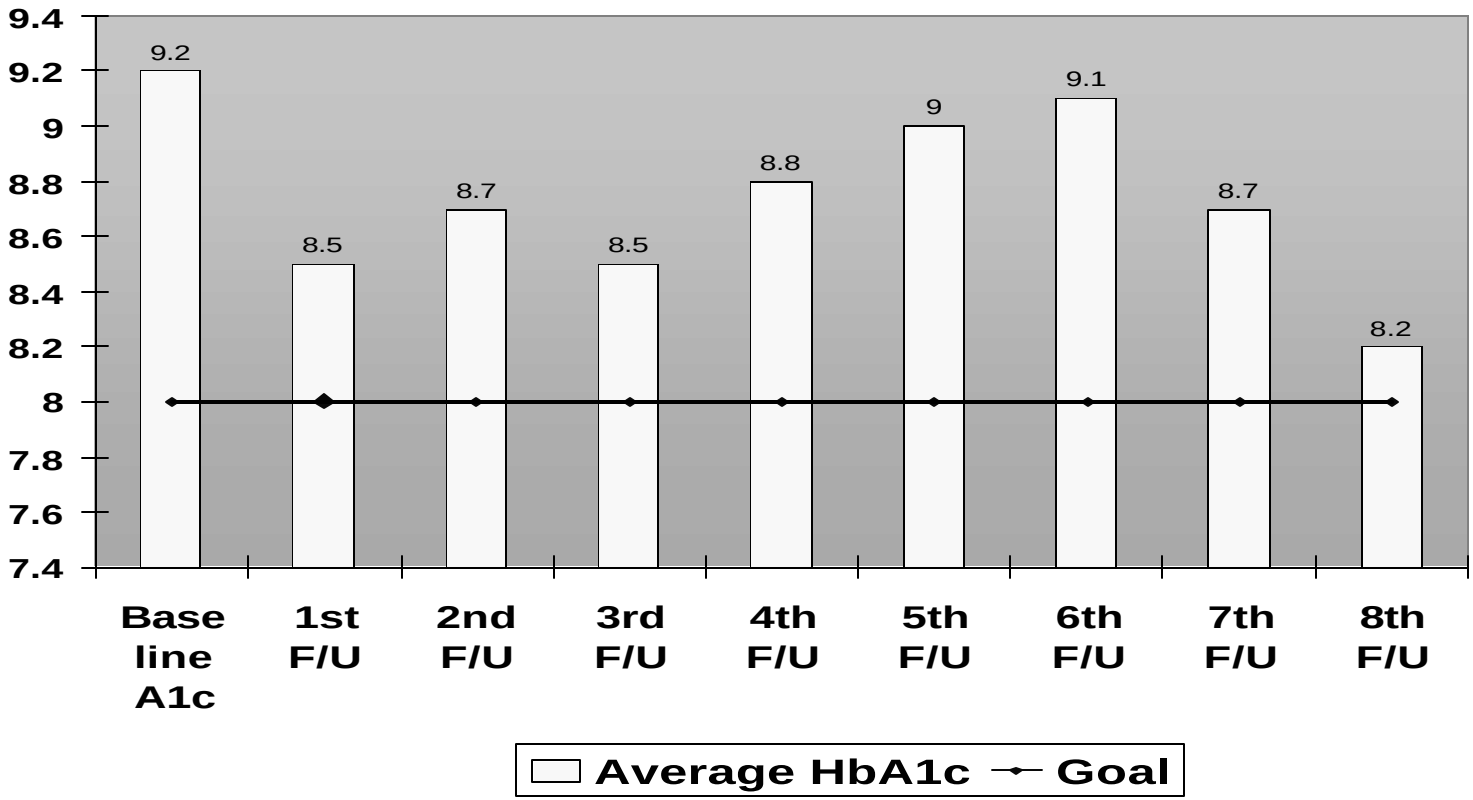
- Quality
- Cost
- Access
- Satisfaction
  - ➔ patients
  - ➔ practitioners
  - ➔ stockholders

Outcomes: Assessment and Feedback

n = 127

Reference Primary Health Care DSM Statistics-
Oct.. 2001 - Present

Patients Continously Enrolled at Least 12 Months
Patients' Average HbA1c



Outcomes: Assessment and Feedback

- High Beta-Agonist Report
- Fall Hospitalization & Emergency Room Visit Report
- Point-of-Care Alerts

Clinical Practice Guidelines

- Based on existing expert panel and consensus reports
- Collaborative development and approval
- Distribution to all practitioners
- CME opportunity
- Bi-annual review

KAISER PERMANENTE

Management of Asthma
Clinical Practice Guideline
Revised July 17, 2002

This guideline is informational only and is not intended or designed as a substitute for the reasonable exercise of independent clinical judgment by providers in any particular set of circumstances.

The primary source for this guideline is the National Heart, Lung and Blood Institute's Expert Panel Report 2: Guidelines for the Diagnosis and Management of Asthma *(1997 and the 2002 update). The Expert Panel Reports incorporate published evidence and expert opinion. The types and strengths of supporting evidence are available in the full* Expert Panel Report 2 *and* 2002 Update *at* http://www.nhlbi.nih.gov/.

PEDIATRICS ALERT: This clinical practice guideline is applicable to children and adults with asthma. Information specific to pediatric patients is denoted with this icon.

Section 1: Initial Assessment and Diagnosis

To establish an asthma diagnosis, determine the following:

1. **History of episodic symptoms of asthma:**
   - ? Wheezing;
   - ? Chest tightness;
   - ? Shortness of breath; and
   - ? Coughing, particularly at night or in the early morning.

2. **Alternative diagnoses are excluded**, e.g., vocal cord dysfunction, panic attacks, foreign body aspiration, cardiovascular disease, gastroesophageal reflux, sinusitis, or other respiratory and pulmonary disorders.

3. **Airflow obstruction is at least partially reversible.** Use spirometry to:
   - ? Establish airflow obstruction (FEV_1 <80% predicted or FEV_1 / FVC <65% predicted); and
   - ? Establish reversibility (FEV_1 increases =12% and at least 200 ml after inhaling short-acting bronchodilator).

   Spirometry is *preferred* over peak flow measurements for evaluation of lower airway disease in adults and in older children who can provide reliable performance. Although designed as monitoring rather than diagnostic tools, peak flow meters can be used to confirm responsiveness to β_2-agonists, therefore, the presence of airflow obstruction and reversibility. Trends in peak flow measurements over time that demonstrate recurrent bronchospasm responsive to inhaled albuterol can be considered confirmatory for asthma. Peak flow monitoring also can detect peak flow variability, thereby, aiding the determination of asthma severity for patients with asthma symptoms and normal daytime spirometry. Note: There is wide variability even in the best-published peak expiratory flow reference values, therefore, reference values need to be specific to each brand.

PEDIATRICS ALERT: For children under 4 years old, assessment and diagnosis of asthma may be limited to clinical assessment of improvement in wheeze or coughing symptoms in response to bronchodilator or anti-inflammatory medications.

Looking Ahead

- Earlier Identification/ Intervention
- Greater Outreach to our Community
- Broader Range of Services
- Decrease Tx Variability
- Increase Effectiveness of Care